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# A Study of Mental Health and Academic Achievement of B.Ed. Students in Relation with Family Climate

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## I. INTRODUCTION

The family environment plays a critical role in shaping the academic achievement and mental health of students. Numerous studies have highlighted the significant impact of the family unit on children's overall development, including their educational outcomes and psychological well-being. Understanding how the family environment influences academic achievement and mental health can provide valuable insights for parents, educators, and policymakers in creating supportive and conducive environments for students to thrive.

Academic achievement is a multifaceted concept that encompasses various aspects of a student's educational journey, such as grades, test scores, school engagement, and academic motivation. Research has consistently demonstrated a strong correlation between positive family environments and academic success. A nurturing and supportive family environment characterized by warmth, encouragement, and parental involvement has been associated with improved educational outcomes for children (Dearing et al., 2006). When parents are actively engaged in their child's education, they can provide necessary guidance, set high expectations, and create a conducive learning environment at home. These factors contribute to increased motivation, better study habits, and enhanced academic performance.

Furthermore, the family environment has a profound impact on the mental health and well-being of students. Adolescence is a critical period for mental health development, and the family unit serves as a primary socializing agent during this phase. A supportive family environment, characterized by open communication, emotional support, and positive parent-child relationships, can serve as a protective factor against mental health issues such as anxiety and depression (Shek, 2007). Conversely, a hostile or dysfunctional family environment can increase the risk of mental health problems among students, leading to decreased academic performance and overall well-being.

The influence of the family environment on academic achievement and mental health can be explained through various mechanisms. First, the family environment shapes the values, attitudes, and beliefs that students internalize. Parents who prioritize education and create a culture of learning at home instill a strong academic work ethic in their children, promoting a positive attitude towards education. Second, the quality of parent-child interactions, including the presence of emotional warmth and support, fosters a sense of security and belongingness, contributing to students' overall mental health. Third, the family environment also influences access to resources and opportunities, such as educational materials, extracurricular activities, and supportive networks, which can enhance academic achievement and well-being.

## II. LITERATURE REVIEW

The impact of the family environment on the academic achievement and mental health of students has been extensively studied in the literature. Numerous research studies have explored the relationship between family dynamics, home environment, and the well-being and educational outcomes of students. This literature review provides an overview of key findings and insights from relevant studies.

### A. Impact of Family Environment on Academic Achievement

Several studies have highlighted the influential role of the family environment on students' academic achievement. A supportive and nurturing family environment has been consistently associated with positive educational outcomes. For instance, a longitudinal study conducted by Dearing et al. (2006) found that parental involvement, warmth, and encouragement were positively correlated with children's literacy development and academic success.

Parental involvement in education has emerged as a significant predictor of academic achievement. A study by Fan and Chen (2001) revealed that parental involvement, including activities such as monitoring homework, communicating with teachers, and engaging in school-related discussions, positively impacted students' academic performance. Similarly, a meta-analysis by Jeynes (2005) found a strong positive relationship between parental involvement and students' academic achievement across various ethnic groups and socioeconomic backgrounds.

Moreover, the quality of parent-child interactions and the emotional climate within the family are crucial factors influencing academic achievement. Research by Sheridan et al. (2010) showed that positive and warm parent-child relationships were associated with higher academic competence in children. Additionally, a study by Davis-Kean (2005) demonstrated that a supportive family climate, characterized by open communication, emotional support, and parental expectations, significantly predicted children's academic success.

### *B. Impact of Family Environment on Mental Health*

The family environment also plays a vital role in shaping the mental health and well-being of students. A supportive and positive family climate has been associated with better mental health outcomes among children and adolescents. Research by Shek (2007) revealed that a healthy family environment, characterized by strong family bonds, effective communication, and emotional support, acted as a protective factor against mental health problems such as anxiety and depression.

Parental warmth and emotional support are crucial for promoting positive mental health outcomes. A study by Lengua et al. (2007) found that children from families with high levels of warmth and support exhibited lower levels of internalizing and externalizing behavior problems. Furthermore, a review by Pinquart and Kauser (2018) highlighted the importance of parental emotional support in reducing psychological distress and enhancing well-being among children and adolescents.

In contrast, a negative or dysfunctional family environment can contribute to mental health difficulties. Research by Patterson et al. (2010) demonstrated that negative family interactions, such as conflict and harsh parenting, were associated with increased emotional and behavioral problems in children. Similarly, a study by Repetti et al. (2002) indicated that exposure to family stressors, such as marital conflicts or financial difficulties, could negatively impact children's mental health outcomes.

### *C. Mediating Factors*

Several mediating factors help explain the relationship between the family environment and students' academic achievement and mental health. One such factor is parental involvement in education, as mentioned earlier. Parental involvement serves as a link between the family environment and academic outcomes, with studies showing that it promotes positive attitudes towards education, higher motivation, and better study habits (Dearing et al., 2006).

Another mediating factor is the quality of parent-child relationships. Positive parent-child relationships foster a sense of security, support, and belongingness, leading to improved mental health outcomes (Sheridan et al., 2010). These relationships also contribute to the development of social-emotional skills, resilience, and self-esteem, which are associated with better academic achievement (Davis-Kean, 2005).

Furthermore, the availability of resources and opportunities within the family, such as access to educational materials, a conducive study environment, and parental educational aspirations, also influence academic achievement (Fan & Chen, 2001).

### *D. Objectives*

- 1) To the study of mental health of female/male B.Ed students with reference of family climate.
- 2) To the study of academic achievement of female/male B.Ed students with reference of family climate.

### *E. Hypotheses*

- 1) There is no significant relationship between mental health and family climate of B. Ed.students.
- 2) There is no significant relationship between academic achievement and family climate of B. Ed.students.

### *F. Methodology*

The descriptive study was conducted on 300 students from five different public schools in Lucknow districts of Uttar Pradesh, India. The sample comprised of 150 male and 150 female students, all aged between 14 and 16 years.

### G. Tools

- 1) *Family Climate Scale*: The Family Climate Scale, developed and standardized by Beena and Shah (1990), was used to assess the family environment. The scale consists of 90 items, with 45 positive and 45 negative items. The overall reliability coefficient of the scale is 0.76.
- 2) *Mental Health Scale*: The Mental Health Scale, formulated by Bhatia and Sharma (1998), was utilized to measure the mental health of the students. The scale comprises a total of 50 items, with 10 items in each dimension, including positive and negative items. Responses were collected using a five-point response format. The overall reliability coefficient of the scale is 0.84.
- 3) *Academic Performance*: The academic performance of the students was assessed based on the total marks obtained in the formative assessment part two, as recorded by their respective schools.
- 4) *Statistical Analysis*: In order to examine the relationship between family environment and mental health, the Chi-square test ( $\chi^2$ ) was employed for data analysis in the present study.

By utilizing these tools and statistical analysis, the study aimed to explore the relationship between the family environment, academic achievement, and mental health of the selected sample of students.

## III. RESULTS AND FINDINGS

Results: Findings of the study are presented in the following tables. Table No 1 is showing the relationship between family environment and mental health among students.

Table No. 1 Showing the relationship between family environment and mental health

Perception of Family Environment	Mental Health			Total
	High	Average	Low	
Favourable	17 (21.64)	107 (101.67)	27 (27.68)	151
Neutral	05 (1.58)	03 (7.41)	03 (2.02)	011
Unfavourable	21 (19.78)	92 (92.92)	25 (25.30)	138
Total	43	202	55	300

$$\chi^2 = 10.97^{**}$$

\*\* Highly Significant at 0.01 level.

Table No. 1 presents the relationship between family environment and mental health, as perceived by the students. The table displays the frequencies and percentages of students classified into different categories based on their perception of family environment (favorable, neutral, and unfavorable) and mental health (high, average, and low).

Among the students who perceived their family environment as favorable, 17 (21.64%) reported high levels of mental health, 107 (101.67%) reported average levels, and 27 (27.68%) reported low levels. In the neutral category, 5 (1.58%) students reported high levels, 3 (7.41%) reported average levels, and 3 (2.02%) reported low levels of mental health. For those who perceived their family environment as unfavorable, 21 (19.78%) reported high levels of mental health, 92 (92.92%) reported average levels, and 25 (25.30%) reported low levels.

The total frequencies for each category are shown in the "Total" row. The chi-square test was conducted to determine the significance of the relationship between family environment and mental health. The chi-square value obtained was 10.97\*\*, indicating a highly significant relationship at the 0.01 level.

Based on the findings, it can be interpreted that there is a significant association between students' perception of family environment and their mental health. Students who perceive a favorable family environment are more likely to report higher levels of mental health, while those who perceive an unfavorable family environment are more likely to report lower levels.



Table No. 2. Showing the relationship between family environment and academic performance

Perception of Family Environment	Academic Performance			Total
	High	Average	Low	
Favourable	17 (22.15)	117 (106.71)	17 (22.15)	151
Neutral	02 (1.61)	06 (7.77)	03 (1.61)	011
Unfavourable	25 (20.24)	89 (97.52)	24 (20.24)	138
Total	44	212	44	300

$$\chi^2 = 7.64^{\#}$$

<sup>#</sup>Not Significant

Table No. 2 illustrates the relationship between family environment and academic performance, as perceived by the students. The table displays the frequencies and percentages of students categorized based on their perception of family environment (favorable, neutral, and unfavorable) and their academic performance (high, average, and low).

Among the students who perceived their family environment as favorable, 17 (22.15%) reported high academic performance, 117 (106.71%) reported average performance, and 17 (22.15%) reported low performance. In the neutral category, 2 (1.61%) students reported high performance, 6 (7.77%) reported average performance, and 3 (1.61%) reported low performance. For those who perceived their family environment as unfavorable, 25 (20.24%) reported high performance, 89 (97.52%) reported average performance, and 24 (20.24%) reported low performance.

The total frequencies for each category are shown in the "Total" row. To determine the significance of the relationship between family environment and academic performance, a chi-square test was conducted. The chi-square value obtained was 7.64<sup>#</sup>, indicating that the relationship is not significant.

Based on the findings, it can be concluded that there is no significant association between students' perception of family environment and their academic performance. The perception of family environment does not appear to have a substantial impact on students' academic achievements.

Table No. 3 Showing the relationship between academic performance and mental health

Mental Health	Academic Performance			Total
	High	Average	Low	
High	10 (6.89)	35 (33.21)	02 (6.89)	47
Average	22 (28.01)	146 (134.97)	23 (28.01)	191
Low	12 (9.09)	31 (43.81)	19 (9.09)	62
Total	44	212	44	300

$$\chi^2 = 23.54^{**}$$

<sup>\*\*</sup>Highly Significant at 0.01 level.

Table No. 3 presents the relationship between academic performance and mental health among the students. The table displays the frequencies and percentages of students classified into different categories based on their academic performance (high, average, and low) and their mental health (high, average, and low).

Among the students with high mental health, 10 (6.89%) reported high academic performance, 35 (33.21%) reported average performance, and 2 (6.89%) reported low performance. For students with average mental health, 22 (28.01%) reported high academic performance, 146 (134.97%) reported average performance, and 23 (28.01%) reported low performance. Among students with low mental health, 12 (9.09%) reported high academic performance, 31 (43.81%) reported average performance, and 19 (9.09%) reported low performance.

The total frequencies for each category are shown in the "Total" row. A chi-square test was conducted to determine the significance of the relationship between academic performance and mental health. The chi-square value obtained was 23.54\*\*, indicating a highly significant relationship at the 0.01 level.

Based on the findings, it can be interpreted that there is a significant association between students' academic performance and their mental health. Students with higher levels of mental health are more likely to exhibit higher academic performance, while those with lower levels of mental health are more likely to exhibit lower academic performance.

#### IV. CONCLUSION

In conclusion, the present study examined the impact of family environment on the academic achievement and mental health of students. The findings revealed significant relationships between family environment and both academic performance and mental health.

Regarding the relationship between family environment and mental health, the results indicated that students who perceived a favorable family environment tended to report higher levels of mental health. Conversely, students who perceived an unfavorable family environment were more likely to experience lower levels of mental health. These findings highlight the influential role of family dynamics and support in promoting positive mental well-being among students.

Similarly, the study demonstrated a significant association between academic performance and mental health. Students with higher levels of mental health were more likely to achieve higher academic performance, while those with lower levels of mental health tended to exhibit lower academic performance. These findings underscore the importance of addressing students' mental health needs to enhance their educational outcomes.

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